

# The Ballarat Naturalist

DECEMBER 2011



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## MOUNT BECKWORTH EXCURSION LEADER FRAN HANRAHAN

On a warm overcast day with no breeze, eight members headed off to Mount Beckworth. Fran explained the geology of the mount that was formed 400 million years ago from magma that was pushed up into the overlying Ordovician rock and cooled to form granite. The Ordovician



Dillwynia sericea—Sticky Everlasting

rock has been eroded away leaving the granite mount seen today. The mount has an altitude of 634 metres. Messmate, Manna Gum and Long-leaved Box trees grow on the lower slopes with Silver Banksia, Drooping Sheoak and Yellow Box on the higher slopes.

Near the small dam at the entrance from Mountain creek road White-browed Wood-swallows were seen overhead. Yellow-tufted, Fuscous and Black-chinned Honeyeaters were also seen here. There were some flowers remaining on the Hedge Wattle *Acacia paradoxa* which is the most common understorey plant in this area. Near the main dam Late Black

Wattle *Acacia mearnsii* was in flower. White-faced and White-necked Herons were feeding in the dam. Their reflection could be seen in the still water. Exotic Fog, Shell and Sweet Vernal grasses were growing well this year as well as Kangaroo, Spear and Wallaby grass species. Two mushrooms with greyish caps were seen. These had white gills and white stems that were encased in a sac or volva at the bottom. These were an *Amanita* species, possibly *Amanita umbrinella*.

In the area east of the picnic tables we saw the Stinking Pennywort *Hydrocotyle laxiflora*, Scaly Buttons *Leptorhynchus squamatus*, Twining Fringe-lily *Thysanotus patersonii*, St Johns Wort *Hypericum perforatum*, Wiry Buttons, and the Tall Sundew *Drosera peltata*. The pale blue



Thelmitra ixiodes—Spotted Sun Orchid

Slender Sun Orchid *Thelmitra pauciflora* was the most common sun orchid seen. The Dotted Sun Orchid *Thelmitra ixioides* was also seen. Masses of Chocolate lilies *Thysanotus patersonii* were seen, especially in the damper spots. Milkmaids *Burchardia umbellata* were still flowering as was Daphne Heath *Brachyloma daphnoides*, Wattle Mat-rush *Lomandra multiflora* and the Purple Beard Orchid *Calochilus robertsonii*. Various shades of the Blue

Pincushion *Brunonia australis* were seen. Honey bees were using a hole of a Yellow box tree for a hive.

A group of Varied Sitellas was seen feeding on the trunk of a box tree. These birds generally move downward when feeding, unlike



**Racteantha viscosa—Blue Pincush-**

the tree-creepers that move upward. Various Melaleucas, Tea Trees and Banksia have been planted near the dam. Blue Wrens were feeding here and Long-billed Corellas were flying overhead. A Sacred Kingfisher perched on a horizontal branch of a gum about 100 metres away from the dam for a few minutes before flying off.

After lunch a now smaller group drove around to the Cork Oaks on the





Brunonia australis—Showy Parrot-pea

west side of the mount. We passed through large areas of the bright yellow flowered Sticky Everlastings *Bracteanta viscosa*. In the valley below the cork oaks, chest high bracken was growing. Mistletoe with drooping leaves was growing in a Late Black Wattle and in a Blackwood. In the flatter area we visited later, we saw the ~~Rocky~~

Fern *Cheilanthes austrotenuifolia*, Magenta

Storksbill *Pelargonium rodneyanum*, Kangaroo Apple *Solanum lacinatedum* and the Showy Parrot-pea *Dillwynia sericea*.

Back at the entrance dam we added Black-faced Cuckoo-shrike, Eastern Rosellas and a calling Fan-tailed Cuckoo to our bird list. Two Wedge-tailed Eagles were seen flying in the distance. On our way out along Mountain creek road, the dainty Fairies Aprons *Utricularia dichotoma*, Small Loosestrife *Lythrum hyssopifolia*, and the Yellow Star *Hypoxis vaginatus* were noticed.

On Eastern Peake road near Mount Bolton we stopped when we saw an Echidna on the side of the road. We were able to view it for a while before it moved off into the grass. A male Scarlet robin was seen. Magpies were harassing a Brown Falcon that was sitting in a gum tree in a paddock. On a full Lake Learmonth, Wood and White-eyed ducks, Coots and Swans were seen from the road. At the Burrumbeet race course John was keen to check up on the Brolgas nesting in the water in the centre of the track. One bird was sitting on a nest in the water about 30 metres from the edge. Brolga eggs have an incubation period of 28-30 days. A bird has been on the nest for over three weeks, so the eggs should soon be hatched. The young leave the nest a day or two after hatching, have body feathers 4-5 weeks later, and are fully feathered in three months and can fly at three and a half months. After we had left the nest John spotted another brolga flying toward the nest area. We returned towards the nest and the brolga that had returned was now about 20 metres from the bird on the nest, and was preening its feathers while standing in the water. Both sexes are said to share incubation of the eggs.

*Les Hanrahan, Report and photos*

## **STELLA BEDGGOOD MEMORIAL LECTURE.**

This year's lecture was presented by Dr. Kevin Tolhurst, Senior lecturer, Fire Ecology and Management, Department of Forest and Ecosystem Science, University of Melbourne. The title of his presentation was Fire in Landscapes – lessons from the Wombat fire effects study (1984 – 2003) 'Recovery and Resilience'.

He started with a slide which said 'An unintended consequence of our desire to control fires is that we have changed the natural fire regimes of the bush'.

Kevin's study was set up to establish how much fire there should be and how often. A report of this study – 'the ecological effects of repeated low intensity fire' is available on the DSE web site. Trial plots were set up in the Wombat Forest, in the Blakeville area and both north and south of the dividing range (as there are differences in the climate and forest).

There are five burn treatments –

- Long unburnt (last burnt in 1935)
- 2 x autumn burns)(1 x burn as often as possible e.g. every 3 years
- 2 x spring burns )(1 x burn approximately every 10 years

The burns were to be of low intensity, where flame heights averaged 0.5m, with a maximum height of 3 – 5m.

The forest in the Blakeville area is dominated by three eucalypt species i.e. *E. obliqua*, Messmate Stringybark; *E. ovata*, Swamp Gum; *E. rubida*, Candlebark.

Many life forms/features/aspects that make up the forest were monitored to see what changes occurred as a result of each of the burn regimes. Some of the results from the vast amount of information that Kevin presented are –

Long unburnt forest had a decrease in understorey plants (approx. 15%); an increase in climbers, shrubs and geophytes (e.g. orchids); a decline in herbs, trees and legumes. These effects may be due to drought and drought recovery and the aging of the forest.

With spring burns the understorey is declining.

With autumn burning the understorey initially declined but then plateaued.

There were no species lost completely under any treatment.

Surface litter – the average was 12 tonnes per hectare but can be 50% more or less than this depending on the season. Litter needs about 20% moisture



content for bacteria and fungi to decompose it; invertebrates also generally prefer moister seasons. Equilibrium is reached 8-10 years after a fire and then time doesn't matter.

Soil carbon – long unburnt treatment gained soil carbon; short term burns (both spring and autumn) lost soil carbon; spring 10 year burns stayed about the same and autumn 10 year burns gained a little.

Worm numbers depend on the soil moisture – they are more affected by spring burns when they are usually closer to the surface; autumn burns usually have less effect as the worms are deeper in the soil due dry conditions.

Soil fungi – autumn 3 year burn sites had reduced numbers of species; other burn regimes all had much the same number of species; spring burns reduced the total volume of fungi.

Bat activity – less on all burn sites with autumn burns having the greatest effect.

Patchiness – unburnt areas usually associated with logs, stumps and rocks on the ground (by creating fire shadows). Animals use the unburnt patches to hide and search for food. Typically the unburnt patches are more likely to be in the gullies (wetter); the ridges being drier are more likely to be burnt.

One of Kevin's summing up remarks was that 'the environment is complex and we need to be smarter in how we deal with fire'.

*Paul Norquay.*

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**FRENCH ISLAND EXCURSION SATURDAY 30 OCTOBER  
SEANA CAMP**

The ferry transported 40 people from Cowes on Phillip Island to Tankerton on French Island. Approaching the wharf Pied Cormorants were perched in a channel marker. Extensive mudflats were exposed at low tide and we found Pied Oystercatcher, White-faced Heron, Masked Lapwing and Eastern Curlew. Swans with cygnets were seen in coastal samphire flats. Royal Spoonbill and White Ibis were seen on other sections of the beach.

French Island has a population of about 80 people, no police or sealed roads. We were met by Lois Airs, a fourth generation islander who owns the property originally farmed by her grandmother. She runs a tourism

business and during our tour we learnt about aspects of the history and natural history of the island. Travelling in a 1970's Bedford bus, we travelled along the road on the west side of the French Island stopping at points of interest.

We walked through a section of the National Park which occupies 60% of the island. The Coast Teatree on the dunes provided a sheltered habitat and we found Nodding Greenhood and Mosquito Orchid – some of the 102 orchid species of FI. Morning tea was enjoyed in heath land where Prickly and Heath tea tree were flowering as were Parrot Peas, Guinea Flower, Common Apple-berry. Sweet Wattle had finished flowering and the pods were developing.

We called in at the French Island General Store which stocks the basic necessities as well as local jams and produces. Photographs of the local flora were on display and local artists work was for sale. The only primary school on the island is Perseverance Primary School which has 11 students – all girls! What are the odds of that?

Lunch was at Lois' property – Bayview Chicory Kiln. Most people alighted from the bus at the corner of the property and walked through a patch of remnant vegetation. Some plants were labelled including Small Grass-tree and Common Flat-pea. The shed built around the Chicory kiln is a museum with a varied collection of household and farm equipment. Lois explained how the chicory roots were washed and then sliced before being spread on a mesh floor above a wood fire for drying in the kiln. The dried chicory was bagged and transported to Melbourne to be sold by the Chicory Marketing Board. We were given a hot or cold drink made with coffee and chicory essence during lunch. Koalas were seen in trees on the property and along roadsides during the tour. Many of the eucalypt trees were severely affected by overgrazing by Koalas. Three hundred Koalas have been caught this year and the females receive a sterilizing implant.

The afternoon began in the bushland around the cemetery. A Large Duck-orchid was flowering at the side of the track as was Blue-spike Milkwort. The cleared area surrounding the cemetery had a dense cover of native grasses.

At the Barge landing we saw a barge arrive with 2 vehicles from Phillip Island. The cost of a return journey for a private vehicle is \$160 with trucks and busses costing up to \$400. All this adds to the cost of living on FI.

Unfortunately the Sea Eagle which inhabits the area was not seen. Cape



Barren Geese first arrived in 1989 and have bred on the island since 2004.

Afternoon tea was served at the community hall. Scones, a variety of locally made jams and cream were enjoyed by all. Joan Broadberry thanked Lois and her helpers were thanked for an enjoyable and informative day.

The return trip to Phillip Island was via Stoney Point on the Mornington Peninsula. The ferry crew assisted people to step on to the bobbing boat as the southwest wind had blown up a rough sea and we were encouraged to take a seat in the cabin as soon as possible. Australian Gannets were seen on the return trip.

*John Gregurke*

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### **BALLARAT FIELD NATURALIST'S CAMP AT HALLS GAP SUNDAY NOVEMBER 20TH.**

How delightful to see sunshine and some blue sky after yesterday's showers, cloud and grey conditions! Once more we were woken at 5.30am by a loud dawn chorus – beginning with a Boobook Owl in the half light, fol-



The Supervisor—  
Halls Gap Botanical Gardens

lowed by Wattle Birds, Currawongs & Magpies, screeching Sulphur-crested Cockatoos, Crimson Rosellas, an insistent Fan-tailed Cuckoo – these being the most obvious!

We began the day at the small Halls Gap Botanical Garden behind the caravan park in the centre of town. Amongst large Manna Gums and Blackwoods were plantings of many

endemic and other species to be found in the Grampians. The wet weather since the drought broke had led to a great deal of weed growth, and we assisted the plantings by removing choking clumps of Yorkshire Fog and other invasive annoyances; the local volunteers could not keep pace with it all! Grampians Gum *E. alpina*, Small-flower Grevillea *G. gariwerdensis* – a delicate mauve bloom, Totem Poles *Melaleuca decussata* and Rock Banksia *B. saxicola* were notable speci-



Grevillea gariwerdensis



mens. In the miniature wetland Running Marshflower *Villarsia reniformis* was to be found. Common Fringe-myrtle found around the Grampians and generally known as *Calytrix tetragona* is known here as *C. sullivanii*, named for a local botanist. And a delightful, whimsical piece of artwork on the scar of a tree depicting the home of koalas had us all chuckling.

The volunteers were in the process of mulching the beds and guards had been put around young plants to prevent kangaroos from browsing. Deer can also be a problem. Information plaques explain the ecology of various plants and habitats. The creek adjacent to the Garden had been severely eroded by the downpours of January – its channel had been greatly widened and laid bare, large boulders lay along the bottom and cobbles were everywhere. Needless to say, several trees had been felled by being undermined by the floods.



Koals live hers!



FNCB at Turret Falls

Moving on to the Wonderland car-park we had coffee, then walked off along the track to Turret Falls, 1.8km return. This trail was the highlight of the day – clear sunny weather, and a good variety of plants in bloom. The track wound gradually

upwards through a mixture of ground covers, shrubs and trees with views to the elephant-hide textures of the sandstone; the appearance of several intrepid bushwalkers along the ledges gave a good idea of the scale of these features.

The Common Fringe Lily *Thysanotus tuberosus* was at its most perfect – we all felt that these were the most pristine specimens we had ever seen. The grevilleas *G. alpina* Cat's Claws and *G. aquifolium* Variable Prickly





Common Fringe Lily

Grevillea were much in evidence, and a highlight was the Orange Bell-climber *Billardiera bignoniacea*, the plant which graces the front cover of Ian McCann's 2000 Edition of *The Grampians in Flower*.

On arrival at the falls a handy bench cut out of the hillside provided an ideal viewpoint to appreciate the lacy fall of water over the sandstone ledges. At the foot of the falls were "mills" where

circular features had been eroded, probably with the aid of gravel or pebbles suspended in the rushing water. Ferns and mosses grew in the cracks between bedding planes, benefitting from the spray and shady crevices.

After lunch in the carpark we drove to Reed's Lookout in order to walk to The Balconies. Near the start of the track we found Fairies' Aprons *Utricularia uniflora* – a bladderwort – growing out of a bed of moss covering bare rock over which run-off was still evident – wet knees as we attempted to get close-up photos! All *Utricularia* are carnivorous and capture small organisms by means of bladder-like traps.



Fairies Aprons

"Terrestrial species tend to have tiny traps that feed on minute prey such as [protozoa](#) and [rotifers](#) swimming in water-saturated soil. The traps can range in size from 0.2 mm to 1.2 cm. The bladder, when "set", is under negative pressure in relation to its environment so that when the trapdoor is mechanically triggered, the prey, along with the water surrounding it, is swept into the bladder. Once the bladder is full of water, the door closes again, the whole process taking only ten to fifteen thousandths of a second." (From Wikipedia – there is a comprehensive article illustrating the means by which these plants capture their prey).

This expanse of bare rock interspersed with crevices was a rich source of interest as we found Necklace ferns hiding in the damp shade, and a tiny fascinating succulent plant with a minute mauve flower which needs some research as identification defeated us all. Various daisies were present, not all in bloom. At this point there is a wonderful view over Lake Wartook





Orange Bell-climber

which lies in a syncline in the Mt Difficult range.

We continued up to The Balconies, to face a ferocious wind blowing up the cliff face, so after a quick look we meandered back to the vehicles, some members to return to Ballarat and some back to the campsite for a third night, returning home on Monday.

Thanks to John Gregurke for his initial suggestion that we come here for our annual camp – The Takaru Resort was ideal in giving us a range of accommodation options and handily situated for our daily forays. As luck would have it, the Saturday saw the re-opening of the main road across the Grampians, so we potentially had access to many of the better known sites. Many of the remoter dirt roads remained closed.

*Carol Hall, Report and photos.*

#### VAL SENT HER REFLECTIONS OF THE CLUB CAMP...

The weather was generally kind to us on our Sat excursion and we saw a number of wildflowers, although many were past their best. There were



good displays of fringe lily (seen), thryptomine, holly grevillea and another red/yellow grevillea, bank-sias. A special find was some tiny duck orchids

In the afternoon we climbed Flat Rock up near Mt Zero, which is a good shorter alternative for the

bush walker while the Pinnacle track is still closed

Our *camp* was held at the very pleasant Takuru Bush Rest at the foot of Lake Bellfield dam wall. Cockatoos greeted us at our cabins in the hope of a free feed .

*Val Hocking, Report and photos*





**FIELD NATURALISTS CLUB OF BALLARAT INCORPORATED**  
**No. A0014919P ABN 13 150 403 135**  
**Minutes of the 33<sup>rd</sup> Annual Stella Bedggood Memorial Lecture**  
**held at the Primary Industries Training Centre**  
**on the 4<sup>th</sup> November 2011.**

The President Elspeth Swan welcomed 60 people including members of the Bedggood family, visitors and club members.

**Apologies** were received from Craig Fletcher, Mayor of Ballarat; Jaala Pulford MLC, Geoff Howard MLA, Sharon Knight MLA, Catherine King MHR, Marlene Smith, Edward Bedggood, Graeme Reynolds, Douglas Menon, John Mildren.

The **guest lecturer** was Dr. Kevin Tolhurst who had kindly agreed to step in, owing to the death of the scheduled speaker Ron Hateley.

Kevin Tolhurst is Senior Lecturer in Fire Ecology and Management in the Department of Forest and Ecosystem Science, University of Melbourne based in Creswick and a member of the Bushfire Cooperative Research Centre.

His talk covered the results of long-term research on the impact of controlled burning at frequencies of 3, 5 and 10 years on the soil fauna and litter, and thus the impact on biodiversity. These tests had been carried out in the Wombat Forest at locations such as Blakeville where Kevin had taken us on an excursion in 2003. Kevin illustrated his talk with a considerable amount of data and photographs taken before and after the burns.

Elsbeth Swan thanked Kevin and presented him with a gift.

Supper was served at the conclusion of the evening.



## CALENDAR 2011/2012

### DECEMBER

- Fri 2 Tanya Loos, Naturalist, Nature columnist for the *Hepburn Advocate*.  
*Scats, Bones and Feathers—being a bush detective*
- Sun 4 *Enfield (pm only)* Bill Murphy, Club Member

**2012**

### FEBRUARY

- Fri 3 Murray Ralph, Wombat forest Care  
*Flora, Fauna & Conservation Values of the Wombat State Forest.*
- Sun 5 *Bellarine Peninsula*, Carol Hall, Club Member



To new members  
Tünde Meikle  
Margaret Rich



### Committee

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Vice-President.....Mr Greg Binns  
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Mrs Val Hocking .....  
Ms Nina Netherway (editor)

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**Meetings** are held at the Primary Industries Training Centre, cnr Gillies and Gregory Sts, on the first Friday of the month at 7.30pm..

**Excursions:** Leave from the carpark at the Primary Industries Training Centre, cnr Gillies and Gregory Sts.

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